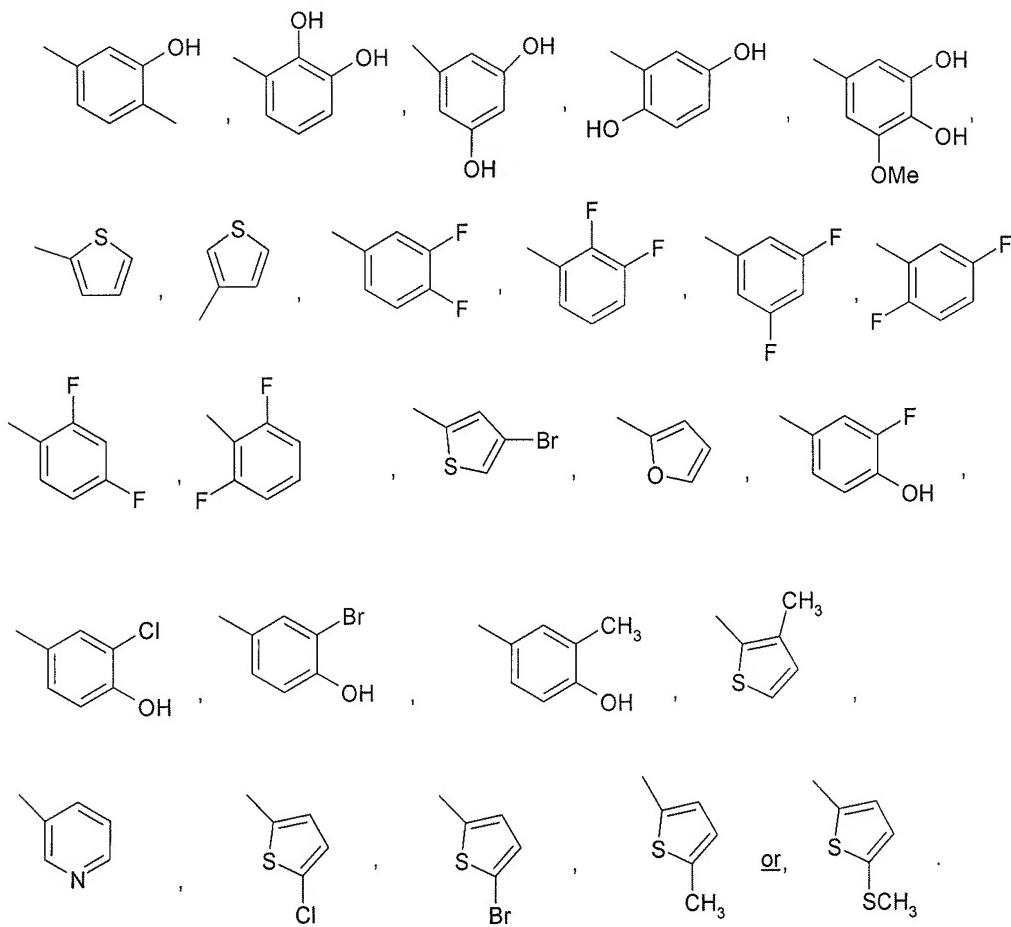


**Listing of Claims:**

1-8. (Cancelled).

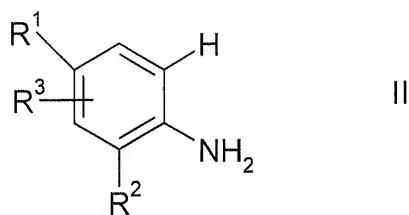
9. (Currently amended) The compound according to Claim 1 30 or a pharmaceutically usable derivative, solvate, tautomer, salt, stereoisomer thereof or mixture thereof in any ratio in which

$R^6$  is one of the following:



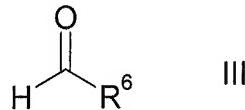
10-13. (Cancelled)

14. (Withdrawn, currently amended) A method for preparing the compound according to Claim 4 30 or a ~~pharmaceutically usable derivative~~, salt, solvate, tautomer, stereoisomer thereof or mixture thereof in any ratio, comprising that  
a compound of formula II



in which R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> have the meanings indicated in Claim 4 30,

is reacted with a compound of the formula III

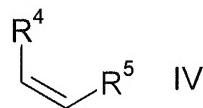


in which

R<sup>6</sup> has the meaning indicated in Claim 4 30,

and

with a compound of the formula IV, the double-bond isomer thereof (E isomer) or mixtures thereof



in which R<sup>4</sup> and R<sup>5</sup> have the meanings indicated in Claim 4 30,

and, optionally, a radical R<sup>7</sup> which denotes H is converted into a radical R<sup>7</sup> which has a meaning other than H,

and/or, optionally,

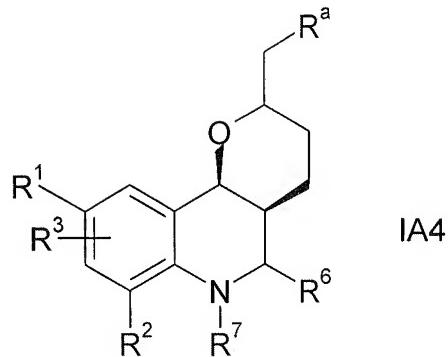
a base or acid of the formula I is converted into one of its salts.

15. (Withdrawn, previously presented) The method according to Claim 14, wherein the reaction is carried out in presence of a protonic acid or Lewis acid.

16. (Withdrawn, previously presented) The method according to Claim 14, wherein the reaction is carried out in presence of trifluoroacetic acid, hexafluoroisopropanol, bismuth(III) chloride, ytterbium(III) triflate, scandium(III) triflate or cerium(IV) ammonium nitrate.

17-29 (Cancelled).

30. (Currently amended) The A compound of Claim 1 of formula IA4 or a pharmaceutically usable derivative, solvate, tautomer, salts, stereoisomer thereof or mixture thereof in any ratio



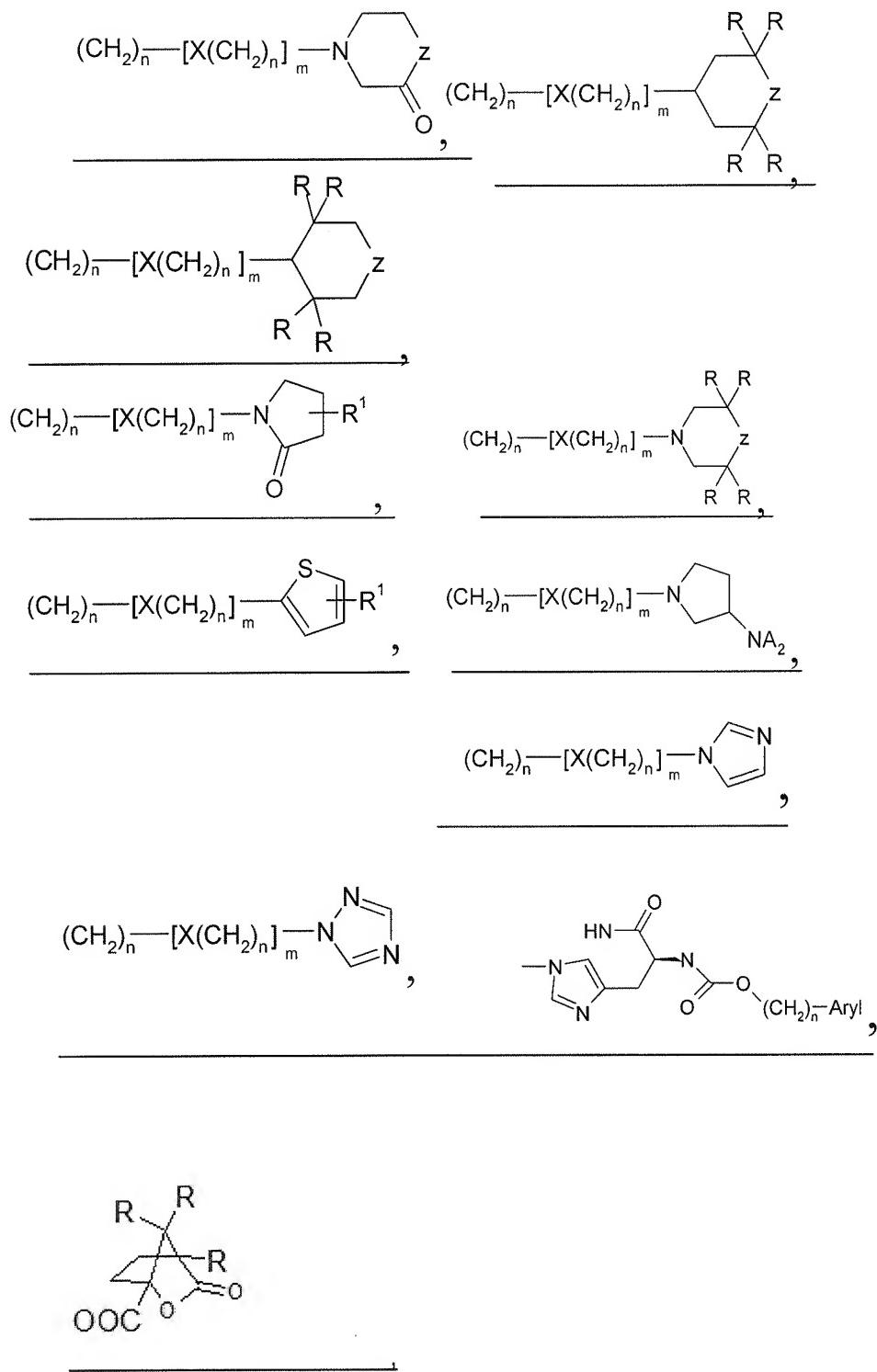
in which

R<sup>1</sup> is A, CF<sub>3</sub>, OCF<sub>3</sub>, SA, SCN, CH<sub>2</sub>CN, -OCOA, Hal, or SCF<sub>3</sub>, t-butyl, CH(CH<sub>3</sub>)CH<sub>2</sub>CH<sub>3</sub>, isopropyl, ethyl or methyl,

R<sup>2</sup> is F or H,

R<sup>3</sup> is H<sub>+</sub>,

R<sup>a</sup> is 1-piperazinyl, N-morpholinyl, NHR<sub>1</sub> or NR<sub>2</sub>,



OR, NHR, NR<sub>2</sub>, NR(CH<sub>2</sub>)<sub>n</sub>-aryl, NR(CH<sub>2</sub>)<sub>n</sub>OR, COOR, OCOR,  
NR(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>, N[(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>]CO(CH<sub>2</sub>)<sub>n</sub>-aryl,  
N[(CH<sub>2</sub>)<sub>n</sub>NHCOOR]CO-aryl, N[CH<sub>2</sub>(CH<sub>2</sub>)<sub>n</sub>OR]<sub>2</sub>,  
NR(CH<sub>2</sub>)<sub>n</sub>X(CH<sub>2</sub>)<sub>n</sub>OH, O(CO)NR(CH<sub>2</sub>)<sub>n</sub>OR, O(CO)(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>,  
N[(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>]CO(CH<sub>2</sub>)<sub>n</sub>-aryl, N(R)(CH<sub>2</sub>)<sub>n</sub>N(R)COOR, OSO<sub>2</sub>A,  
OCH<sub>2</sub>(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>, Hal, NCOOR, N(CH<sub>2</sub>)<sub>n</sub>CONR<sub>2</sub>,  
XCONR(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>, N[(CH<sub>2</sub>)<sub>n</sub>XCOOR]CO(CH<sub>2</sub>)<sub>n</sub>-aryl,  
N[(CH<sub>2</sub>)<sub>n</sub>XR]CO(CH<sub>2</sub>)<sub>n</sub>X-aryl, or N[(CH<sub>2</sub>)<sub>n</sub>XR]SO<sub>2</sub>(CH<sub>2</sub>)<sub>n</sub>-aryl.

aryl is phenyl, naphthyl or biphenyl, each of which is un-substituted or mono-, di- or trisubstituted by Hal, A, OH, OA, NH<sub>2</sub>, NO<sub>2</sub>, CN, COOH, COOA, CONH<sub>2</sub>, NHCOA, NHCONH<sub>2</sub>, NHSO<sub>2</sub>A, CHO, COA, SO<sub>2</sub>NH<sub>2</sub>, SO<sub>2</sub>A, -CH<sub>2</sub>-COOH or -OCH<sub>2</sub>-COOH,

R is H or A, in case of geminal radicals R is-(CH<sub>2</sub>)<sub>5</sub>-, -(CH<sub>2</sub>)<sub>4</sub>-, -(CH<sub>2</sub>)<sub>2</sub>-X-(CH<sub>2</sub>)<sub>2</sub> or -(CH<sub>2</sub>)<sub>2</sub>-Z-(CH<sub>2</sub>)<sub>n</sub>,

A is alkyl or cycloalkyl, in which one or more H atoms are optionally replaced by Hal,

Hal is F or Cl,

X is O, S or NR,

Z is CH<sub>2</sub>, X, CHCONH<sub>2</sub>, CH(CH<sub>2</sub>)<sub>n</sub>NRCOOR, CHNRCOOR, NCO, CH(CH<sub>2</sub>)<sub>n</sub>COOR, NCOOR, CH(CH<sub>2</sub>)<sub>n</sub>OH, N(CH<sub>2</sub>)<sub>n</sub>OH, CHNH<sub>2</sub>, CH(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>, CH(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>, C(OH)R, CHNCOR, CH(CH<sub>2</sub>)<sub>n</sub>-aryl, CH(CH<sub>2</sub>)<sub>n</sub>-heteroaryl, CH(CH<sub>2</sub>)<sub>n</sub>R<sup>4</sup>, N(CH<sub>2</sub>)<sub>n</sub>COOR, CH(CH<sub>2</sub>)<sub>n</sub>X(CH<sub>2</sub>)<sub>n</sub>-aryl, CH(CH<sub>2</sub>)<sub>n</sub>X(CH<sub>2</sub>)<sub>n</sub>-

~~heteroaryl, N(CH<sub>2</sub>)<sub>n</sub>CONR<sub>2</sub>, XCONR(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>,~~  
~~N[(CH<sub>2</sub>)<sub>n</sub>XCOOR]CO(CH<sub>2</sub>)<sub>n</sub>-aryl, N[(CH<sub>2</sub>)<sub>n</sub>XR]CO(CH<sub>2</sub>)<sub>n</sub>-aryl,~~  
~~N[(CH<sub>2</sub>)<sub>n</sub>XR]CO(CH<sub>2</sub>)<sub>n</sub>X-aryl, N[(CH<sub>2</sub>)<sub>n</sub>XR]SO<sub>2</sub>(CH<sub>2</sub>)<sub>n</sub>-aryl,~~  
~~N[(CH<sub>2</sub>)<sub>n</sub>NRCOOR]CO(CH<sub>2</sub>)<sub>n</sub>-aryl, N[(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>]CO(CH<sub>2</sub>)<sub>n</sub>-~~  
~~aryl, N[(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>]CO(CH<sub>2</sub>)<sub>n</sub>NR-aryl,~~  
~~N[(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>]SO<sub>2</sub>(CH<sub>2</sub>)<sub>n</sub>-aryl, N[(CH<sub>2</sub>)<sub>n</sub>XR]CO(CH<sub>2</sub>)<sub>n</sub>-~~  
~~heteroaryl, N[(CH<sub>2</sub>)<sub>n</sub>XR]CO(CH<sub>2</sub>)<sub>n</sub>X-heteroaryl,~~  
~~N[(CH<sub>2</sub>)<sub>n</sub>XR]SO<sub>2</sub>(CH<sub>2</sub>)<sub>n</sub>-heteroaryl,~~  
~~N[(CH<sub>2</sub>)<sub>n</sub>NRCOOR]CO(CH<sub>2</sub>)<sub>n</sub>-heteroaryl,~~  
~~N[(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>]CO(CH<sub>2</sub>)<sub>n</sub>-heteroaryl,~~  
~~N[(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>]CO(CH<sub>2</sub>)<sub>n</sub>NR-heteroaryl,~~  
~~N[(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>]SO<sub>2</sub>(CH<sub>2</sub>)<sub>n</sub>-heteroaryl, O(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>,~~  
~~X(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>, or NCO(CH<sub>2</sub>)<sub>n</sub>NR<sub>2</sub>,~~

R<sup>6</sup> is phenyl, 2-, 3- or 4-pyridyl, pyrimidyl, furyl or thienyl, each of which is unsubstituted or mono- or polysubstituted by Hal, NO<sub>2</sub>, CN, OH, CF<sub>3</sub>, OCH(CF<sub>3</sub>)<sub>2</sub>, OCOCH<sub>3</sub> or A,

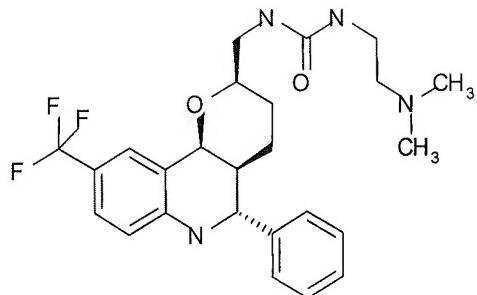
R<sup>7</sup> is H or A<sub>1</sub>

m is 0, 1 or 2 and

n is 0,1,2,3,4,5,6 or 7

or a pharmaceutically useable derivative, solvate, tautomer, salt, stereoisomer thereof or mixture therefore in any ratio.

31. (Currently amended) The compound of claim 30 of the following formula or a pharmaceutically useable derivative, solvate, tautomer, salt, stereoisomer thereof or a mixture thereof in any ratio:



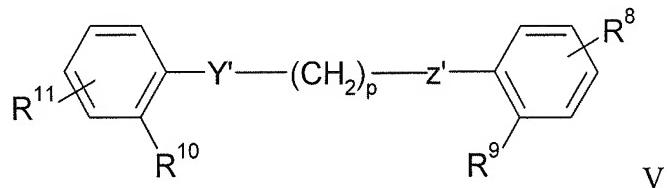
32. (Currently amended) The compound according to Claim 30, or a ~~pharmaceutically usable derivative, solvate, tautomer, salt, stereoisomer thereof or mixture thereof in any ratio, in which alkyl is methyl.~~

33. (Currently amended) The compound according to Claim 30 or a ~~pharmaceutically usable derivative, solvate, tautomer, salt, stereoisomer thereof or mixture thereof in any ratio in which~~

$R^7$  is H.

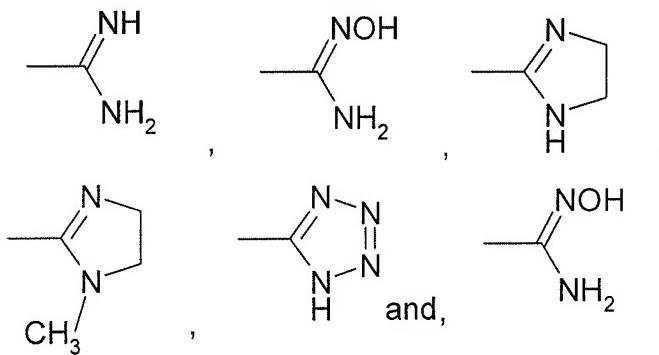
34. (Currently amended) The compound according to Claim 30 or a ~~pharmaceutically usable derivative, salt, solvate, tautomer, stereoisomer thereof or mixture thereof in any ratio, or optionally an excipient and/or an adjuvant, in a pharmaceutical composition.~~

35. (Withdrawn, currently amended) A mixture comprising the compound according to Claim 30 or a ~~pharmaceutically usable derivative, solvate, tautomer, salt, stereoisomer thereof or mixture thereof in any ratio and a compound of formula V, or an analogue thereof or metabolite thereof~~



in which

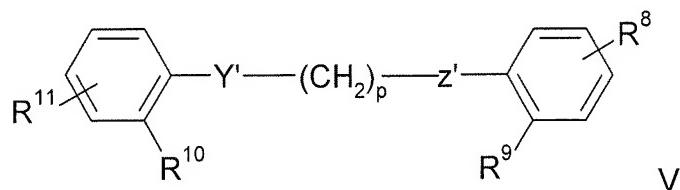
Y' and Z' each, independently of one another, are O or N, R<sup>9</sup> and R<sup>10</sup> each, independently of one another, are H, OH, halogen, OC1-10-alkyl, OCF<sub>3</sub>, NO<sub>2</sub> or NH<sub>2</sub>, p is an integer between 2 and 6 inclusively, and R<sup>8</sup> and R<sup>11</sup> are each, independently of one another, in the meta- or para-position and are selected from the group consisting of:



36. (Withdrawn, previously presented) The mixture according to Claim 35, wherein the compound of formula V is pentamidine or a salt thereof.
37. (Withdrawn, currently amended) A method comprising, administering to a patient the compound according to Claim 30 or a pharmaceutically usable derivative, salt, solvate, tautomer, stereoisomer thereof or mixture thereof in any ratio, for treatment of disease which can be influenced by the inhibition, regulation and/or modulation of mitotic motor protein Eg5.
38. (Withdrawn, currently amended) A method comprising administering to a patient the compound according to Claim 30, or a pharmaceutically usable derivative, salt, solvate, tautomer, stereoisomer thereof or mixture thereof in any ratio for treatment and prophylaxis of cancer.
39. (Withdrawn, previously presented) The method according to Claim 38, where the cancer is associated with squamous epithelium, bladder,

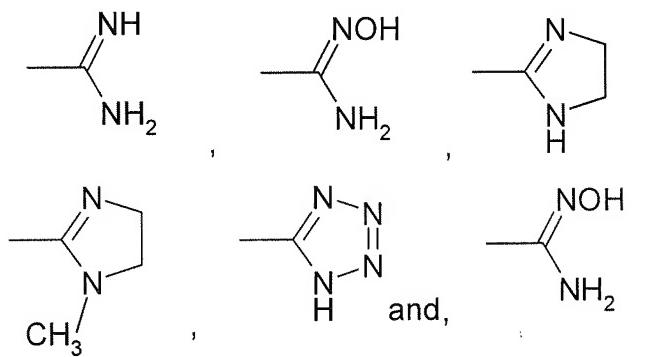
stomach, kidneys, head and neck, oesophagus, cervix, thyroid, intestine, liver, brain, prostate, urogenital tract, lymphatic system, stomach, larynx and/or lung.

40. (Withdrawn, previously presented) The method according to Claim 39, where the cancer originates from monocytic leukaemia, lung adenocarcinoma, small-cell lung carcinoma, pancreatic cancer, glioblastomas and breast carcinoma and colon carcinoma.
41. (Withdrawn, previously presented) The method according to Claim 38, where the cancer to be treated is of blood and immune system.
42. (Withdrawn, previously presented) The method according to Claim 41, where the cancer originates from acute myelotic leukaemia, chronic myelotic leukaemia, acute lymphatic leukaemia and/or chronic lymphatic leukaemia.
43. (Withdrawn, currently amended) The method comprising administering to a patient a therapeutically effective amount of the compound according to Claim 30 or a pharmaceutically usable derivative, salt, solvate, tautomer, stereoisomer thereof or mixture thereof in any ratio, for treatment of cancer in combination with a therapeutically effective amount of a compound of the formula V, or an analogue thereof and/or a metabolite thereof.



in which

Y' and Z' each, independently of one another, are O or N, R<sup>9</sup> and R<sup>10</sup> each, independently of one another, are H, OH, halogen, OC1-10-alkyl, OCF<sub>3</sub>, NO<sub>2</sub> or NH<sub>2</sub>, p is an integer between 2 and 6 inclusively, and R<sup>8</sup> and R<sup>11</sup> are each, independently of one another, in the meta- or para-position and are selected from the group consisting of:



where

the compound of the formula V and the compound of the formula V, or analogue thereof and/or metabolites thereof are administered simultaneously or within 14 days of one another in amounts which are sufficient to inhibit the growth of a tumour or of other hyperproliferative cells.

44. (Withdrawn, previously presented) The method according to Claim 43, wherein the compound of the formula V used is pentamidine or a salt thereof.
45. (Withdrawn, currently amended) The method comprising administering to a patient the compound according to Claim 30 or a pharmaceutically usable salt, solvate, tautomer, stereoisomer thereof or mixture thereof in any ratio, for treatment of tumours where a therapeutically effective amount of the compound according to Claim 30 is administered in

combination with radiotherapy or a compound selected from the group consisting of 1) an oestrogen receptor modulator, 2) an androgen receptor modulator, 3) a retinoid receptor modulator, 4) a cytotoxic agent, 5) an antiproliferative agent, 6) a prenyl-protein transferase inhibitor, 7) an HMG-CoA reductase inhibitor, 8) an HIV protease inhibitor, 9) a reverse transcriptase inhibitor and 10) an angiogenesis inhibitors.

46. (New) The compound according to Claim 30 of the sub-formulae I13 or I13a or a solvate, tautomer, salt, stereoisomer thereof or mixture thereof in any ratio:

